IN THE CLAIMS

Please add new claims 33-105 as indicated below. All of the presently pending claims are reproduced below with the status of each claim indicated in parentheses.

1. (Original) An illumination apparatus, comprising:

a first number of first light sources adapted to generate first radiation having a first spectrum; and

a second number of second light sources adapted to generate second radiation having a second spectrum different than the first spectrum,

wherein the first number and the second number are different.

2. (Original) The illumination apparatus of claim 1, further comprising:

at least one controller coupled to the first number of first light sources and the second number of second light sources and configured to independently control at least a first intensity of the first radiation and a second intensity of the second radiation so as to controllably vary at least an overall perceivable color of visible radiation generated by the illumination apparatus.

3. (Original) The illumination apparatus of claim 2, wherein the at least one controller is configured to generate a first control signal to control all of the first light sources substantially identically, and a second control signal to control all of the second light sources substantially identically.

4. (Original) The illumination apparatus of claim 2, wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

5. (Original) The illumination apparatus of claim 4, wherein the at least one controller is configured to generate a first PWM control signal to control all of the first light sources substantially identically, and a second PWM control signal to control all of the second light sources substantially identically.

6. (Original) The illumination apparatus of claim 3, wherein each light source of the first and second light sources is an LED.

7. (Original) The illumination apparatus of claim 2, wherein the at least one controller is configured as an addressable controller capable of receiving at least one network signal including at least first lighting information relating to the overall perceivable color of visible radiation generated by the illumination apparatus.

8. (Original) The illumination apparatus of claim 7, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the at least one controller is configured to process the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

9. (Original) The illumination apparatus of claim 7, wherein the at least one network signal is formatted using a DMX protocol, and wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

10. (Original) An illumination method, comprising acts of:

A) generating first radiation having a first spectrum from a first number of first light sources; and

B) generating second radiation having a second spectrum different than the first spectrum from a second number of second light sources,

wherein the first number and the second number are different.

11. (Original) The illumination method of claim 10, further comprising an act of:

C) mixing at least a portion of the first radiation and a portion of the second radiation to provide visible radiation having an overall perceivable color.

12. (Original) The illumination method of claim 11, further comprising an act of:

D) independently controlling at least a first intensity of the first radiation and a second intensity of the second radiation so as to controllably vary at least the overall perceivable color of the visible radiation.

13. (Original) The illumination method of claim 12, wherein the act D) includes acts of:

D1) controlling all of the first light sources substantially identically; and

D2) controlling all of the second light sources substantially identically.

14. (Original) The illumination method of claim 13, wherein the act D) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique so as to controllably vary at least the overall perceivable color of the visible radiation.

15. (Original) The illumination method of claim 13, wherein each light source of the first and second light sources is an LED.

16. (Original) The illumination method of claim 12, further comprising an act of:

receiving at least one addressed network signal including at least first lighting information relating to the overall perceivable color of the visible radiation,

wherein the act D) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the first lighting information.

17. (Original) The illumination method of claim 16, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the method further comprises an act of:

processing the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

18. (Original) The illumination method of claim 16, wherein the at least one network signal is formatted using a DMX protocol, and wherein the act D) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

19. (Original) An illumination apparatus, comprising:

a plurality of first light sources adapted to generate first radiation having a first spectrum;

a plurality of second light sources adapted to generate second radiation having a second spectrum different than the first spectrum; and

at least one controller coupled to the plurality of first light sources and the plurality of second light sources and configured to independently control at least a first intensity of the first radiation and a second intensity of the second radiation so as to controllably vary at least an overall perceivable color of visible radiation generated by the illumination apparatus,

wherein the at least one controller is configured to generate a first control signal to control all of the first light sources substantially identically, and a second control signal to control all of the second light sources substantially identically.

20. (Original) The illumination apparatus of claim 19, wherein respective numbers of the first light sources and the second light sources are different.

21. (Original) The illumination apparatus of claim 19, wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

22. (Original) The illumination apparatus of claim 19, wherein each light source of the first and second light sources is an LED.

23. (Original) The illumination apparatus of claim 19, wherein the at least one controller is configured as an addressable controller capable of receiving at least one network signal including at least first lighting information relating to the overall perceivable color of visible radiation generated by the illumination apparatus.

24. (Original) The illumination apparatus of claim 23, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the at least one controller is configured to process the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

25. (Original) The illumination apparatus of claim 23, wherein the at least one network signal is formatted using a DMX protocol, and wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

26. (Original) An illumination method, comprising acts of:

A) generating first radiation having a first spectrum from a plurality of first light sources;

B) generating second radiation having a second spectrum different than the first spectrum from a plurality of second light sources;

C) mixing at least a portion of the first radiation and a portion of the second radiation to provide visible radiation having an overall perceivable color; and

D) independently controlling at least a first intensity of the first radiation and a second intensity of the second radiation so as to controllably vary at least the overall perceivable color of the visible radiation,

wherein the act D) includes acts of:

D1) controlling all of the first light sources substantially identically; and

D2) controlling all of the second light sources substantially identically.

27. (Original) The illumination method of claim 26, wherein respective numbers of the first light sources and the second light sources are different.

28. (Original) The illumination method of claim 26, wherein the act D) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

29. (Original) The illumination method of claim 26, wherein each light source of the first and second light sources is an LED.

30. (Original) The illumination method of claim 12, further comprising an act of:

receiving at least one addressed network signal including at least first lighting information relating to the overall perceivable color of the visible radiation,

wherein the act D) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the first lighting information.

31. (Original) The illumination method of claim 30, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the method further comprises an act of:

processing the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

32. (Original) The illumination method of claim 30, wherein the at least one network signal is formatted using a DMX protocol, and wherein the act D) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

33. (New) The illumination apparatus of claim 1, wherein each light source of the first and second light sources is an LED, and wherein the apparatus further comprises:

at least one controller coupled to the first number of first light sources and the second number of second light sources and configured to control at least a first intensity of the first radiation and a second intensity of the second radiation such that an overall perceivable color of visible radiation generated by the apparatus is essentially white.

34. (New) The illumination apparatus of claim 33, further comprising at least one power connection coupled to the at least one controller, the at least one power connection configured to engage mechanically and electrically with a conventional light socket.

35. (New) The illumination apparatus of claim 34, wherein the at least one power connection includes an Edison screw-type power connection.

36. (New) The illumination apparatus of claim 34, further comprising at least one of a housing and a mounting for the first and second light sources and the at least one controller, wherein the at least one of the housing and the mounting is configured to resemble at least one type of conventional light bulb.

37. (New) The illumination apparatus of claim 36, wherein the at least one of the housing and the mounting is configured to resemble an Edison-mount light bulb housing.

38. (New) The illumination apparatus of claim 36, wherein at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation so as to controllably vary the overall perceivable color of the visible radiation generated by the illumination apparatus.

39. (New) The illumination apparatus of claim 38, further comprising at least one user interface coupled to the at least one controller and configured to facilitate an adjustment of the overall perceivable color of the visible radiation generated by the illumination apparatus.

40. (New) The illumination apparatus of claim 38, further comprising at least one sensor coupled to the at least one controller and configured to generate at least one control signal in response to at least one detectable condition, wherein the at least one controller is configured to control the overall perceivable color of the visible radiation generated by the illumination apparatus in response to the at least one control signal.

41. (New) The illumination apparatus of claim 38, further comprising at least one of a receiver and a transmitter coupled to the at least one controller and configured to communicate at least one control signal to or from the illumination apparatus.

42. (New) The illumination apparatus of claim 38, wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

43. (New) The illumination apparatus of claim 38, wherein the at least one controller is configured as an addressable controller capable of receiving at least one network signal including at least first lighting information relating to the overall perceivable color of the visible radiation generated by the illumination apparatus.

44. (New) The illumination apparatus of claim 43, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the at least one controller is configured to process the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

45. (New) The illumination apparatus of claim 43, wherein the at least one network signal is formatted using a DMX protocol, and wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

46. (New) The method of claim 11, wherein each light source of the first and second light sources is an LED, and wherein the method further comprises an act of:

D) controlling at least the first intensity of the first radiation and the second intensity of the second radiation such that the overall perceivable color of the visible radiation is essentially white.

47. (New) The method of claim 46, wherein the first and second light sources are arranged as a package including at least one of a housing and a mounting, and wherein the method further comprises an act of:

E) engaging the package mechanically and electrically with a conventional light socket.

48. (New) The method of claim 46, wherein the act D) includes an act of:

D1) independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation so as to controllably vary the overall perceivable color of the visible radiation.

49. (New) The method of claim 48, further comprising an act of:

adjusting the overall perceivable color of the visible radiation via at least one user interface.

50. (New) The method of claim 48, further comprising an act of:

controlling the overall perceivable color of the visible radiation in response to at least one detectable condition.

51. (New) The method of claim 48, wherein the first and second light sources are arranged as a package including at least one of a housing and a mounting, and wherein the method further comprises an act of:

communicating at least one control signal to or from the package.

52. (New) The method of claim 48, wherein the act D1) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

53. (New) The method of claim 48, further comprising an act of:

E) receiving at least one network signal including at least first lighting information relating to the overall perceivable color of the visible radiation,

wherein the act D1) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the first lighting information.

54. (New) The method of claim 53, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the method further includes an act of:

processing the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

55. (New) The method of claim 54, wherein the at least one network signal is formatted using a DMX protocol, and wherein the act D1) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

56. (New) The illumination apparatus of claim 19, wherein:

each light source of the first and second light sources is an LED; and

the at least one controller is configured to control at least the first intensity of the first radiation and the second intensity of the second radiation such that the overall perceivable color of the visible radiation is essentially white.

57. (New) The illumination apparatus of claim 56, further comprising at least one power connection coupled to the at least one controller, the at least one power connection configured to engage mechanically and electrically with a conventional light socket.

58. (New) The illumination apparatus of claim 57, wherein the at least one power connection includes an Edison screw-type power connection.

59. (New) The illumination apparatus of claim 57, further comprising at least one of a housing and a mounting for the first and second light sources and the at least one controller, wherein the at least one of the housing and the mounting is configured to resemble at least one type of conventional light bulb.

60. (New) The illumination apparatus of claim 59, wherein the at least one of the housing and the mounting is configured to resemble an Edison-mount light bulb housing.

61. (New) The illumination apparatus of claim 57, further comprising at least one user interface coupled to the at least one controller and configured to facilitate an adjustment of the overall perceivable color of the visible radiation generated by the illumination apparatus.

62. (New) The illumination apparatus of claim 57, further comprising at least one sensor coupled to the at least one controller and configured to generate at least one control signal in response to at least one detectable condition, wherein the at least one controller is configured to control the overall perceivable color of the visible radiation generated by the illumination apparatus in response to the at least one control signal.

63. (New) The illumination apparatus of claim 57, further comprising at least one of a receiver and a transmitter coupled to the at least one controller and configured to communicate at least one control signal to or from the illumination apparatus.

64. (New) The illumination apparatus of claim 57, wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

65. (New) The illumination apparatus of claim 57, wherein the at least one controller is configured as an addressable controller capable of receiving at least one network signal including at least first lighting information relating to the overall perceivable color of the visible radiation generated by the illumination apparatus.

66. (New) The illumination apparatus of claim 65, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the at least one controller is configured to process the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

67. (New) The illumination apparatus of claim 65, wherein the at least one network signal is formatted using a DMX protocol, and wherein the at least one controller is configured to

independently control at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

68. (New) The method of claim 26, wherein each light source of the first and second light sources is an LED, and wherein the act D) comprises an act of:

D3) controlling at least the first intensity of the first radiation and the second intensity of the second radiation such that the overall perceivable color of the visible radiation is essentially white.

69. (New) The method of claim 68, wherein the first and second light sources are arranged as a package including at least one of a housing and a mounting, and wherein the method further comprises an act of:

E) engaging the package mechanically and electrically with a conventional light socket.

70. (New) The method of claim 68, further comprising an act of:

adjusting the overall perceivable color of the visible radiation via at least one user interface.

71. (New) The method of claim 68, further comprising an act of:

controlling the overall perceivable color of the visible radiation in response to at least one detectable condition.

72. (New) The method of claim 68, wherein the first and second light sources are arranged as a package including at least one of a housing and a mounting, and wherein the method further comprises an act of:

communicating at least one control signal to or from the package.

73. (New) The method of claim 68, wherein the act D3) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

74. (New) The method of claim 68, further comprising an act of:

E) receiving at least one network signal including at least first lighting information relating to the overall perceivable color of the visible radiation,

wherein the act D3) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the first lighting information.

75. (New) The method of claim 74, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the method further includes an act of:

processing the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

76. (New) The method of claim 74, wherein the at least one network signal is formatted using a DMX protocol, and wherein the act D3) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

77. (New) An illumination apparatus, comprising:

a plurality of first LEDs adapted to generate first radiation having a first spectrum;

a plurality of second LEDs adapted to generate second radiation having a second spectrum different than the first spectrum; and

at least one controller coupled to the plurality of first LEDs and the plurality of second LEDs and configured to independently control at least a first intensity of the first radiation and a second intensity of the second radiation such that an overall perceivable color of visible radiation generated by the illumination apparatus is essentially white.

78. (New) The illumination apparatus of claim 77, wherein the at least one controller is configured to generate a first control signal to control all of the first LEDs substantially identically, and a second control signal to control all of the second LEDs substantially identically.

79. (New) The illumination apparatus of claim 77, wherein respective numbers of the first LEDs and the second LEDs are different.

80. (New) The illumination apparatus of claim 77, further comprising at least one power connection coupled to the at least one controller, the at least one power connection configured to engage mechanically and electrically with a conventional light socket.

81. (New) The illumination apparatus of claim 80, wherein the at least one power connection includes an Edison screw-type power connection.

82. (New) The illumination apparatus of claim 80, further comprising at least one of a housing and a mounting for the respective pluralities of first and second LEDs and the at least one controller, wherein the at least one of the housing and the mounting is configured to resemble at least one type of conventional light bulb.

83. (New) The illumination apparatus of claim 82, wherein the at least one of the housing and the mounting is configured to resemble an Edison-mount light bulb housing.

84. (New) The illumination apparatus of claim 77, wherein at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation so as to controllably vary the overall perceivable color of the visible radiation generated by the illumination apparatus.

85. (New) The illumination apparatus of claim 84, further comprising at least one user interface coupled to the at least one controller and configured to facilitate an adjustment of the overall perceivable color of the visible radiation generated by the illumination apparatus.

86. (New) The illumination apparatus of claim 84, further comprising at least one sensor coupled to the at least one controller and configured to generate at least one control signal in response to at least one detectable condition, wherein the at least one controller is configured to control the overall perceivable color of the visible radiation generated by the illumination apparatus in response to the at least one control signal.

87. (New) The illumination apparatus of claim 84, further comprising at least one of a receiver and a transmitter coupled to the at least one controller and configured to communicate at least one control signal to or from the illumination apparatus.

88. (New) The illumination apparatus of claim 84, wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

89. (New) The illumination apparatus of claim 88, wherein the at least one controller is configured to generate a first PWM control signal to control all of the first LEDs substantially identically, and a second PWM control signal to control all of the second LEDs substantially identically.

90. (New) The illumination apparatus of claim 84, wherein the at least one controller is configured as an addressable controller capable of receiving at least one network signal including at least first lighting information relating to the overall perceivable color of the visible radiation generated by the illumination apparatus.

91. (New) The illumination apparatus of claim 90, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the at least one controller is configured to process the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

92. (New) The illumination apparatus of claim 90, wherein the at least one network signal is formatted using a DMX protocol, and wherein the at least one controller is configured to independently control at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

93. (New) An illumination method, comprising acts of:

A) generating first radiation having a first spectrum from a plurality of first LEDs;

B) generating second radiation having a second spectrum different than the first spectrum from a plurality of second LEDs;

C) mixing at least a portion of the first radiation and a portion of the second radiation to provide visible radiation having an overall perceivable color; and

D) independently controlling at least a first intensity of the first radiation and a second intensity of the second radiation such that the overall perceivable color of the visible radiation is essentially white.

94. (New) The method of claim 93, wherein the act D) includes acts of:

controlling all of the first LEDs substantially identically; and

controlling all of the second LEDs substantially identically.

95. (New) The method of claim 93, wherein respective numbers of the first LEDs and the second LEDs are different.

96. (New) The method of claim 93, wherein the respective pluralities of first and second LEDs are arranged as a package including at least one of a housing and a mounting, and wherein the method further comprises an act of:

E) engaging the package mechanically and electrically with a conventional light socket.

97. (New) The method of claim 93, wherein the act D) includes an act of:

D1) independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation so as to controllably vary the overall perceivable color of the visible radiation.

98. (New) The method of claim 97, further comprising an act of:

adjusting the overall perceivable color of the visible radiation via at least one user interface.

99. (New) The method of claim 97, further comprising an act of:

controlling the overall perceivable color of the visible radiation in response to at least one detectable condition.

100. (New) The method of claim 97, wherein the respective pluralities of first and second LEDs are arranged as a package including at least one of a housing and a mounting, and wherein the method further comprises an act of:

communicating at least one control signal to or from the package.

101. (New) The method of claim 97, wherein the act D1) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation using a pulse width modulation (PWM) technique.

102. (New) The method of claim 97, further comprising an act of:

E) receiving at least one network signal including at least first lighting information relating to the overall perceivable color of the visible radiation,

wherein the act D1) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the first lighting information.

103. (New) The method of claim 102, wherein the at least one network signal includes address information and lighting information for a plurality of illumination apparatus, and wherein the method further includes an act of:

processing the at least one network signal based on at least the address information in the at least one network signal to recover the first lighting information.

104. (New) The method of claim 102, wherein the at least one network signal is formatted using a DMX protocol, and wherein the act D1) includes an act of:

independently controlling at least the first intensity of the first radiation and the second intensity of the second radiation based at least in part on the DMX protocol.

105. (New) An illumination apparatus, comprising:

a plurality of first LEDs adapted to generate first radiation having a first spectrum;

a plurality of second LEDs adapted to generate second radiation having a second spectrum different than the first spectrum;

at least one addressable controller coupled to the plurality of first LEDs and the plurality of second LEDs, the at least one addressable controller configured to be associated with an alterable address, the at least one addressable controller further configured to independently control at least a first intensity of the first radiation and a second intensity of the second radiation so as to controllably vary an overall perceivable color of visible radiation generated by the illumination apparatus; and

an address selection device configured to facilitate a selection of the alterable address associated with the at least one addressable controller.